

1997 Consumption and Expenditures Tables

Electric Air-Conditioning Expenditures Tables

(20 pages, 52 kb)

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These data are from the 1997 Residential Energy Consumption Survey (RECS) which provides information on the use of energy in residential housing units in the United States. The RECS is a national statistical survey that collects data for occupied primary housing units. RECS was first conducted in 1978; the sixth and most recent survey was conducted in 1997 RECS. The data were collected from a sample of 5,900 housing units statistically selected to represent the 101.5 million units in the United States. The 1997 data are available for the four Census regions, the nine Census divisions, and for the four most populous States--California, Florida, New York, and Texas.

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World Wide Web: <http://www.eia.doe.gov/emeu/consumption>

Table CE3-1e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Climate Zone, 1997

	Climate Zone ¹						RSE Row Factors
	Total	Fewer than 2,000 CDD and --				2,000 CDD or More and Fewer than 4,000 HDD	
		More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD		
RSE Column Factor:	0.5	1.9	1.1	0.9	1.1	0.9	
Million Households							
Total U.S. Households	101.5	9.3	28.0	22.5	19.5	22.2	8.3
No/Don't Use Air-Conditioning	28.8	4.1	9.8	4.9	7.5	2.6	9.8
Electric Air-Conditioning ²	72.6	5.2	18.2	17.6	12.0	19.6	8.4
Central Air-Conditioning ³	47.5	2.9	10.5	10.3	8.4	15.3	10.0
Room/Wall Air-Conditioning	25.2	2.3	7.7	7.3	3.6	4.3	11.2
Billion Dollars							
Electric Air-Conditioning Expenditures							
Total	10.20	0.25	1.25	1.84	1.70	5.16	10.4
Central Air-Conditioning	8.29	0.19	0.93	1.35	1.39	4.43	11.4
Room/Wall Air-Conditioning	1.91	0.06	0.32	0.49	0.31	0.73	13.0
Dollars per Household⁴							
Electric Air-Conditioning Expenditures per Household							
Electric Air-Conditioning	140	48	69	105	141	264	4.8
Central Air-Conditioning	175	65	89	131	165	290	4.5
Room/Wall Air-Conditioning	76	26	41	68	85	171	6.2
1997 Cooling Degree-Days (CDD) per Household⁴							
1997 Cooling Degree-Days per Household							
Total U.S. Households	1,274	464	590	988	1,310	2,735	4.1
No/Don't Use Air-Conditioning	868	418	487	769	1,054	2,647	7.1
Electric Air-Conditioning	1,435	500	645	1,048	1,470	2,746	3.5
Central Air-Conditioning	1,576	518	658	1,081	1,503	2,782	4.0
Room/Wall Air-Conditioning	1,169	477	628	1,001	1,393	2,619	3.9
Cooled Square Footage (CSF) per Household⁴							
Cooled Square Footage per Household⁵							
Electric Air-Conditioning	1,464	1,705	1,525	1,455	1,389	1,396	3.4
Central Air-Conditioning	1,823	2,314	2,091	1,891	1,690	1,574	3.1
Room/Wall Air-Conditioning	786	944	751	837	690	757	4.9

See footnotes at end of table.

Table CE3-1e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Climate Zone, 1997 (Continued)

	Total	Climate Zone ¹					RSE Row Factors
		Fewer than 2,000 CDD and --				2,000 CDD or More and Fewer than 4,000 HDD	
		More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD		
RSE Column Factor:	0.5	1.9	1.1	0.9	1.1	0.9	

Air-Conditioning Intensity [Cents÷{CDD×(CSF÷1000)}]⁴

Air-Conditioning Intensity							
Electric Air-Conditioning	6.69	5.64	6.97	6.86	6.92	6.88	2.7
Central Air-Conditioning	6.08	5.46	6.44	6.39	6.51	6.61	2.7
Room/Wall Air-Conditioning	8.25	5.86	8.75	8.08	8.86	8.61	5.0

¹ One of five climatically distinct areas, determined according to the 30-year average (1961-1990) of the annual heating and cooling degree-days. For this report, the heating or cooling degree-days are a measure of how cold or how hot a location is over a period of one year, relative to a base temperature of 65 degrees Fahrenheit. A household is assigned to a climate zone according to the 30-year average annual degree-days for an appropriate nearby weather station.

² The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

³ Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These room/wall air-conditioners are not included in the count of 25.2 million households using room/wall air-conditioners. Note: This applies to all occurrences of central air-conditioning.

⁴ Averages are for those households using any electric air-conditioning, central air-conditioning, or room/wall air-conditioning, as applicable.

⁵ In previous RECS, square footage measurements were obtained during the personal interview. In the 1997 RECS, square footage was estimated using a regression equation developed with the 1993 RECS data. The 1997 RECS estimated square footage tends to be larger than the 1993 measured square footage.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE3-2e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Year of Construction, 1997

	Total	Year of Construction						RSE Row Factors
		1990 to 1997 ¹	1980 to 1989	1970 to 1979	1960 to 1969	1950 to 1959	1949 or Before	
RSE Column Factor:	0.5	1.9	1.2	1.0	1.0	1.1	0.9	
Million Households								
Total U.S. Households	101.5	9.7	17.3	19.6	14.4	12.5	27.9	4.2
No/Don't Use Air-Conditioning	28.8	1.4	2.7	4.9	4.4	3.6	11.8	7.9
Electric Air-Conditioning ²	72.6	8.3	14.6	14.7	10.0	8.9	16.1	4.7
Central Air-Conditioning ³	47.5	7.5	12.9	10.8	6.5	4.6	5.2	6.2
Room/Wall Air-Conditioning	25.2	0.8	1.8	3.9	3.5	4.3	10.9	8.6
Billion Dollars								
Electric Air-Conditioning Expenditures								
Total	10.20	1.49	2.60	2.30	1.34	1.08	1.40	7.3
Central Air-Conditioning	8.29	1.44	2.47	1.98	1.06	0.69	0.66	8.7
Room/Wall Air-Conditioning	1.91	0.05	0.13	0.32	0.28	0.39	0.74	11.2
Dollars per Household⁴								
Electric Air-Conditioning Expenditures per Household								
Electric Air-Conditioning	140	179	177	157	134	121	87	5.5
Central Air-Conditioning	175	191	192	184	162	150	128	5.8
Room/Wall Air-Conditioning	76	62	71	83	81	90	68	8.4
1997 Cooling Degree-Days (CDD) per Household⁴								
1997 Cooling Degree-Days per Household								
Total U.S. Households	1,274	1,342	1,557	1,411	1,312	1,257	967	3.9
No/Don't Use Air-Conditioning	868	736	746	877	1,017	943	828	7.7
Electric Air-Conditioning	1,435	1,443	1,704	1,589	1,443	1,385	1,068	4.1
Central Air-Conditioning	1,576	1,478	1,788	1,689	1,558	1,399	1,135	4.9
Room/Wall Air-Conditioning	1,169	1,112	1,094	1,312	1,225	1,370	1,037	5.9
Cooled Square Footage (CSF) per Household⁴								
Cooled Square Footage per Household⁵								
Electric Air-Conditioning	1,464	2,001	1,643	1,436	1,412	1,321	1,158	3.0
Central Air-Conditioning	1,823	2,134	1,770	1,708	1,730	1,786	1,895	2.8
Room/Wall Air-Conditioning	786	760	717	688	811	825	810	5.6

See footnotes at end of table.

Table CE3-2e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Year of Construction, 1997 (Continued)

	Total	Year of Construction						RSE Row Factors
		1990 to 1997 ¹	1980 to 1989	1970 to 1979	1960 to 1969	1950 to 1959	1949 or Before	
RSE Column Factor:	0.5	1.9	1.2	1.0	1.0	1.1	0.9	

Air-Conditioning Intensity [Cents÷(CDD×(CSF÷1000))]⁴

Air-Conditioning Intensity	Total	1990 to 1997 ¹	1980 to 1989	1970 to 1979	1960 to 1969	1950 to 1959	1949 or Before	RSE Row Factors
Electric Air-Conditioning	6.69	6.19	6.33	6.87	6.57	6.61	7.03	3.1
Central Air-Conditioning	6.08	6.06	6.06	6.37	6.00	5.99	5.95	3.3
Room/Wall Air-Conditioning	8.25	7.38	9.06	9.17	8.15	7.97	8.04	6.1

¹ New construction for 1997 includes only those housing units built and occupied between January and the April-August period when the household interviews were conducted.

² The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

³ Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These room/wall air-conditioners are not included in the count of 25.2 million households using room/wall air-conditioners. Note: This applies to all occurrences of central air-conditioning.

⁴ Averages are for those households using any electric air-conditioning, central air-conditioning, or room/wall air-conditioning, as applicable.

⁵ In previous RECS, square footage measurements were obtained during the personal interview. In the 1997 RECS, square footage was estimated using a regression equation developed with the 1993 RECS data. The 1997 RECS estimated square footage tends to be larger than the 1993 measured square footage.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE3-3e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Household Income, 1997

	Total	1997 Household Income				Below Poverty Line	Eligible for Federal Assistance ¹	RSE Row Factors
		Less than \$10,000	\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 or More			
RSE Column Factor:	0.6	1.6	1.0	0.8	0.9	1.4	1.0	
Million Households								
Total U.S. Households	101.5	13.3	29.1	31.1	27.9	14.6	34.1	2.7
No/Don't Use Air-Conditioning	28.8	5.2	9.9	8.0	5.7	6.4	13.2	5.2
Electric Air-Conditioning ²	72.6	8.1	19.3	23.1	22.2	8.3	20.9	3.6
Central Air-Conditioning ³	47.5	3.6	10.9	15.6	17.3	3.7	10.5	5.4
Room/Wall Air-Conditioning	25.2	4.4	8.4	7.5	4.9	4.6	10.4	5.7
Billion Dollars								
Electric Air-Conditioning Expenditures								
Total	10.20	0.91	2.39	2.86	4.04	1.00	2.48	6.1
Central Air-Conditioning	8.29	0.56	1.75	2.35	3.64	0.61	1.64	7.8
Room/Wall Air-Conditioning	1.91	0.36	0.64	0.51	0.41	0.39	0.84	8.5
Dollars per Household⁴								
Electric Air-Conditioning Expenditures per Household								
Electric Air-Conditioning	140	113	124	124	182	120	119	4.8
Central Air-Conditioning	175	153	161	150	210	165	156	5.5
Room/Wall Air-Conditioning	76	81	76	68	84	84	81	6.2
1997 Cooling Degree-Days (CDD) per Household⁴								
1997 Cooling Degree-Days per Household								
Total U.S. Households	1,274	1,392	1,339	1,197	1,235	1,379	1,322	3.1
No/Don't Use Air-Conditioning	868	984	921	808	752	1,003	961	5.5
Electric Air-Conditioning	1,435	1,657	1,553	1,332	1,359	1,666	1,551	3.2
Central Air-Conditioning	1,576	1,829	1,805	1,482	1,464	1,894	1,737	4.2
Room/Wall Air-Conditioning	1,169	1,515	1,227	1,020	983	1,486	1,363	4.0
Cooled Square Footage (CSF) per Household⁴								
Cooled Square Footage per Household⁵								
Electric Air-Conditioning	1,464	884	1,117	1,449	1,990	921	1,055	2.9
Central Air-Conditioning	1,823	1,274	1,425	1,717	2,284	1,346	1,417	3.2
Room/Wall Air-Conditioning	786	563	718	889	945	586	691	3.7

See footnotes at end of table.

Table CE3-3e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Household Income, 1997 (Continued)

	Total	1997 Household Income				Below Poverty Line	Eligible for Federal Assistance ¹	RSE Row Factors
		Less than \$10,000	\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 or More			
RSE Column Factor:	0.6	1.6	1.0	0.8	0.9	1.4	1.0	

Air-Conditioning Intensity [Cents÷{CDD×(CSF÷1000)}]⁴

Air-Conditioning Intensity	Total	Less than \$10,000	\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 or More	Below Poverty Line	Eligible for Federal Assistance ¹	RSE Row Factors
Electric Air-Conditioning	6.69	7.72	7.14	6.40	6.73	7.83	7.25	2.8
Central Air-Conditioning	6.08	6.55	6.27	5.91	6.27	6.49	6.35	3.3
Room/Wall Air-Conditioning	8.25	9.44	8.60	7.47	8.99	9.68	8.59	4.4

¹ Below 150 percent of poverty line or 60 percent of median State income.

² The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

³ Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These room/wall air-conditioners are not included in the count of 25.2 million households using room/wall air-conditioners. Note: This applies to all occurrences of central air-conditioning.

⁴ Averages are for those households using any electric air-conditioning, central air-conditioning, or room/wall air-conditioning, as applicable.

⁵ In previous RECS, square footage measurements were obtained during the personal interview. In the 1997 RECS, square footage was estimated using a regression equation developed with the 1993 RECS data. The 1997 RECS estimated square footage tends to be larger than the 1993 measured square footage.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE3-4e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Type of Housing Unit, 1997

	Type of Housing Unit					RSE Row Factors
	Total	Single-Family	Multifamily		Mobile Home	
			Two to Four Units	Five or More Units		
RSE Column Factor:	0.5	0.6	1.7	1.3	1.6	
Million Households						
Total U.S. Households	101.5	73.7	5.6	15.8	6.3	4.1
No/Don't Use Air-Conditioning	28.8	19.9	2.2	4.9	1.8	7.6
Electric Air-Conditioning ¹	72.6	53.8	3.4	10.9	4.5	4.8
Central Air-Conditioning ²	47.5	36.8	1.6	6.5	2.6	7.0
Room/Wall Air-Conditioning	25.2	17.1	1.8	4.4	1.9	7.8
Billion Dollars						
Electric Air-Conditioning Expenditures						
Total	10.20	8.06	0.29	1.06	0.79	7.6
Central Air-Conditioning	8.29	6.71	0.20	0.82	0.57	8.9
Room/Wall Air-Conditioning	1.91	1.35	0.09	0.24	0.22	9.8
Dollars per Household³						
Electric Air-Conditioning Expenditures per Household						
Electric Air-Conditioning	140	150	85	98	175	5.6
Central Air-Conditioning	175	182	125	126	216	6.0
Room/Wall Air-Conditioning	76	79	50	55	118	6.6
1997 Cooling Degree-Days (CDD) per Household³						
1997 Cooling Degree-Days per Household						
Total U.S. Households	1,274	1,257	1,084	1,418	1,282	4.6
No/Don't Use Air-Conditioning	868	838	779	1,001	942	7.4
Electric Air-Conditioning	1,435	1,411	1,280	1,607	1,420	4.7
Central Air-Conditioning	1,576	1,520	1,591	1,907	1,545	5.6
Room/Wall Air-Conditioning	1,169	1,178	1,007	1,167	1,245	4.9
Cooled Square Footage (CSF) per Household³						
Cooled Square Footage per Household⁴						
Electric Air-Conditioning	1,464	1,699	770	747	904	2.7
Central Air-Conditioning	1,823	2,063	1,035	937	1,125	2.6
Room/Wall Air-Conditioning	786	915	537	470	594	3.6

See footnotes at end of table.

Table CE3-4e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Type of Housing Unit, 1997 (Continued)

	Total	Type of Housing Unit			Mobile Home	RSE Row Factors
		Single-Family	Multifamily			
			Two to Four Units	Five or More Units		
RSE Column Factor:	0.5	0.6	1.7	1.3	1.6	

Air-Conditioning Intensity [Cents÷(CDD×(CSF÷1000))]³

Air-Conditioning Intensity	Total	Single-Family	Two to Four Units	Five or More Units	Mobile Home	RSE Row Factors
Electric Air-Conditioning	6.69	6.24	8.63	8.12	13.64	2.7
Central Air-Conditioning	6.08	5.82	7.59	7.08	12.41	2.9
Room/Wall Air-Conditioning	8.25	7.34	9.25	10.08	15.98	5.0

¹ The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

² Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These room/wall air-conditioners are not included in the count of 25.2 million households using room/wall air-conditioners. Note: This applies to all occurrences of central air-conditioning.

³ Averages are for those households using any electric air-conditioning, central air-conditioning, or room/wall air-conditioning, as applicable.

⁴ In previous RECS, square footage measurements were obtained during the personal interview. In the 1997 RECS, square footage was estimated using a regression equation developed with the 1993 RECS data. The 1997 RECS estimated square footage tends to be larger than the 1993 measured square footage.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE3-7e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Four Most Populated States, 1997

	Total U.S.	Four Most Populated States				RSE Row Factors
		New York	California	Texas	Florida	
RSE Column Factor:	0.4	1.3	1.7	1.1	1.0	
Million Households						
Total U.S. Households	101.5	6.8	11.5	7.0	5.9	NF
No/Don't Use Air-Conditioning	28.8	2.6	6.9	0.6	0.3	11.5
Electric Air-Conditioning ¹	72.6	4.2	4.6	6.3	5.6	3.3
Central Air-Conditioning ²	47.5	1.3	3.2	4.8	4.9	5.4
Room/Wall Air-Conditioning	25.2	3.0	1.4	1.6	0.7	10.7
Billion Dollars						
Electric Air-Conditioning Expenditures						
Total	10.20	0.34	0.58	1.69	1.80	10.3
Central Air-Conditioning	8.29	0.13	0.50	1.41	1.65	10.6
Room/Wall Air-Conditioning	1.91	0.21	0.09	0.28	0.15	17.2
Dollars per Household³						
Electric Air-Conditioning Expenditures per Household						
Electric Air-Conditioning	140	80	127	266	322	8.0
Central Air-Conditioning	175	104	156	296	338	9.1
Room/Wall Air-Conditioning	76	69	63	175	210	10.9
1997 Cooling Degree-Days (CDD) per Household³						
1997 Cooling Degree-Days per Household						
Total U.S. Households	1,274	775	1,132	2,494	3,547	5.7
No/Don't Use Air-Conditioning	868	763	968	2,125	3,567	8.6
Electric Air-Conditioning	1,435	782	1,380	2,530	3,546	5.0
Central Air-Conditioning	1,576	585	1,427	2,536	3,524	6.6
Room/Wall Air-Conditioning	1,169	865	1,274	2,511	3,694	5.1
Cooled Square Footage (CSF) per Household³						
Cooled Square Footage per Household⁴						
Electric Air-Conditioning	1,464	1,081	1,297	1,402	1,523	5.4
Central Air-Conditioning	1,823	1,953	1,622	1,617	1,627	5.9
Room/Wall Air-Conditioning	786	713	556	748	822	7.8

See footnotes at end of table.

Table CE3-7e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Four Most Populated States, 1997 (Continued)

	Total U.S.	Four Most Populated States				RSE Row Factors
		New York	California	Texas	Florida	
RSE Column Factor:	0.4	1.3	1.7	1.1	1.0	

Air-Conditioning Intensity [Cents÷{CDD×(CSF÷1000)}]³

Air-Conditioning Intensity	Total U.S.	New York	California	Texas	Florida	RSE Row Factors
Electric Air-Conditioning	6.69	9.41	7.11	7.51	5.96	3.6
Central Air-Conditioning	6.08	9.14	6.72	7.22	5.90	4.4
Room/Wall Air-Conditioning	8.25	11.19	8.89	9.32	6.90	6.0

¹ The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

² Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These room/wall air-conditioners are not included in the count of 25.2 million households using room/wall air-conditioners. Note: This applies to all occurrences of central air-conditioning.

³ Averages are for those households using any electric air-conditioning, central air-conditioning, or room/wall air-conditioning, as applicable.

⁴ In previous RECS, square footage measurements were obtained during the personal interview. In the 1997 RECS, square footage was estimated using a regression equation developed with the 1993 RECS data. The 1997 RECS estimated square footage tends to be larger than the 1993 measured square footage.

NF = No applicable RSE row factor.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE3-8e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Urban/Rural Location, 1997

	Total	Urban/Rural Location ¹				RSE Row Factors
		City	Town	Suburbs	Rural	
RSE Column Factor:	0.6	0.8	1.4	1.2	1.2	
Million Households						
Total U.S. Households	101.5	48.2	18.2	18.6	16.5	4.2
No/Don't Use Air-Conditioning	28.8	15.1	5.1	3.7	4.9	7.0
Electric Air-Conditioning ²	72.6	33.1	13.1	14.8	11.5	4.4
Central Air-Conditioning ³	47.5	20.5	7.8	11.9	7.2	5.5
Room/Wall Air-Conditioning	25.2	12.6	5.4	2.9	4.3	6.9
Billion Dollars						
Electric Air-Conditioning Expenditures						
Total	10.20	4.58	1.48	2.61	1.53	6.3
Central Air-Conditioning	8.29	3.59	1.15	2.38	1.18	7.1
Room/Wall Air-Conditioning	1.91	1.00	0.33	0.23	0.35	9.2
Dollars per Household⁴						
Electric Air-Conditioning Expenditures per Household						
Electric Air-Conditioning	140	138	113	176	132	4.5
Central Air-Conditioning	175	175	148	199	162	4.6
Room/Wall Air-Conditioning	76	79	62	78	82	6.6
1997 Cooling Degree-Days (CDD) per Household⁴						
1997 Cooling Degree-Days per Household						
Total U.S. Households	1,274	1,401	1,071	1,293	1,105	3.8
No/Don't Use Air-Conditioning	868	993	690	818	705	6.7
Electric Air-Conditioning	1,435	1,586	1,219	1,412	1,276	3.8
Central Air-Conditioning	1,576	1,794	1,362	1,484	1,340	4.4
Room/Wall Air-Conditioning	1,169	1,248	1,011	1,118	1,166	4.9
Cooled Square Footage (CSF) per Household⁴						
Cooled Square Footage per Household⁵						
Electric Air-Conditioning	1,464	1,295	1,429	1,832	1,514	2.7
Central Air-Conditioning	1,823	1,653	1,823	2,068	1,900	2.5
Room/Wall Air-Conditioning	786	713	856	863	859	4.2

See footnotes at end of table.

Table CE3-8e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Urban/Rural Location, 1997 (Continued)

	Total	Urban/Rural Location ¹				RSE Row Factors
		City	Town	Suburbs	Rural	
		0.6	0.8	1.4	1.2	
RSE Column Factor:						
Air-Conditioning Intensity [Cents÷{CDD×(CSF÷1000)}]⁴						
Air-Conditioning Intensity						
Electric Air-Conditioning	6.69	6.74	6.48	6.79	6.86	2.4
Central Air-Conditioning	6.08	5.90	5.94	6.50	6.38	2.6
Room/Wall Air-Conditioning	8.25	8.86	7.20	8.10	8.14	4.6

¹ Based on the household respondent's description rather than the Federal Government definition.

² The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

³ Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These room/wall air-conditioners are not included in the count of 25.2 million households using room/wall air-conditioners. Note: This applies to all occurrences of central air-conditioning.

⁴ Averages are for those households using any electric air-conditioning, central air-conditioning, or room/wall air-conditioning, as applicable.

⁵ In previous RECS, square footage measurements were obtained during the personal interview. In the 1997 RECS, square footage was estimated using a regression equation developed with the 1993 RECS data. The 1997 RECS estimated square footage tends to be larger than the 1993 measured square footage.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE3-9e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Northeast Census Region, 1997

	Total U.S.	Northeast Census Region			RSE Row Factors
		Total	Census Division		
			Middle Atlantic	New England	
RSE Column Factor:	0.5	1.0	1.1	2.0	
Million Households					
Total U.S. Households	101.5	19.7	14.4	5.3	NF
No/Don't Use Air-Conditioning	28.8	7.6	4.7	2.8	6.9
Electric Air-Conditioning ¹	72.6	12.2	9.7	2.5	4.2
Central Air-Conditioning ²	47.5	4.4	4.0	0.4	11.2
Room/Wall Air-Conditioning	25.2	7.8	5.7	2.1	7.4
Billion Dollars					
Electric Air-Conditioning Expenditures					
Total	10.20	0.90	0.77	0.13	7.5
Central Air-Conditioning	8.29	0.48	0.44	0.04	11.1
Room/Wall Air-Conditioning	1.91	0.42	0.33	0.09	9.7
Dollars per Household³					
Electric Air-Conditioning Expenditures per Household					
Electric Air-Conditioning	140	74	80	52	5.0
Central Air-Conditioning	175	110	111	91	7.5
Room/Wall Air-Conditioning	76	54	58	44	5.6
1997 Cooling Degree-Days (CDD) per Household³					
1997 Cooling Degree-Days per Household					
Total U.S. Households	1,274	688	743	537	3.9
No/Don't Use Air-Conditioning	868	627	719	473	6.5
Electric Air-Conditioning	1,435	725	755	609	2.8
Central Air-Conditioning	1,576	673	679	614	4.8
Room/Wall Air-Conditioning	1,169	755	808	608	2.8
Cooled Square Footage (CSF) per Household³					
Cooled Square Footage per Household⁴					
Electric Air-Conditioning	1,464	1,271	1,323	1,070	5.0
Central Air-Conditioning	1,823	2,158	2,148	2,262	5.2
Room/Wall Air-Conditioning	786	774	751	836	5.0

See footnotes at end of table.

Table CE3-9e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Northeast Census Region, 1997 (Continued)

	Total U.S.	Northeast Census Region			RSE Row Factors
		Total	Census Division		
			Middle Atlantic	New England	
RSE Column Factor:	0.5	1.0	1.1	2.0	

Air-Conditioning Intensity [Cents÷(CDD×(CSF÷1000))]³

Air-Conditioning Intensity	Total U.S.	Total	Middle Atlantic	New England	RSE Row Factors
Electric Air-Conditioning	6.69	8.04	7.99	7.99	3.7
Central Air-Conditioning	6.08	7.54	7.64	6.58	5.1
Room/Wall Air-Conditioning	8.25	9.29	9.54	8.73	4.4

¹ The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

² Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These room/wall air-conditioners are not included in the count of 25.2 million households using room/wall air-conditioners. Note: This applies to all occurrences of central air-conditioning.

³ Averages are for those households using any electric air-conditioning, central air-conditioning, or room/wall air-conditioning, as applicable.

⁴ In previous RECS, square footage measurements were obtained during the personal interview. In the 1997 RECS, square footage was estimated using a regression equation developed with the 1993 RECS data. The 1997 RECS estimated square footage tends to be larger than the 1993 measured square footage.

NF = No applicable RSE row factor.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE3-10e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Midwest Census Region, 1997

	Total U.S.	Midwest Census Region			RSE Row Factors
		Total	Census Division		
			East North Central	West North Central	
		RSE Column Factor:	0.6	1.0	
Million Households					
Total U.S. Households	101.5	24.1	16.9	7.2	NF
No/Don't Use Air-Conditioning	28.8	5.5	4.6	0.9	8.0
Electric Air-Conditioning ¹	72.6	18.6	12.4	6.3	2.2
Central Air-Conditioning ²	47.5	12.3	8.0	4.3	4.2
Room/Wall Air-Conditioning	25.2	6.3	4.3	2.0	8.1
Billion Dollars					
Electric Air-Conditioning Expenditures					
Total	10.20	1.52	0.95	0.56	5.3
Central Air-Conditioning	8.29	1.25	0.77	0.48	6.5
Room/Wall Air-Conditioning	1.91	0.27	0.18	0.09	10.3
Dollars per Household³					
Electric Air-Conditioning Expenditures per Household					
Electric Air-Conditioning	140	81	77	90	4.6
Central Air-Conditioning	175	101	95	111	3.9
Room/Wall Air-Conditioning	76	43	43	44	7.4
1997 Cooling Degree-Days (CDD) per Household³					
1997 Cooling Degree-Days per Household					
Total U.S. Households	1,274	704	637	862	4.2
No/Don't Use Air-Conditioning	868	592	563	739	4.0
Electric Air-Conditioning	1,435	737	664	880	4.5
Central Air-Conditioning	1,576	754	670	911	4.9
Room/Wall Air-Conditioning	1,169	703	653	811	4.8
Cooled Square Footage (CSF) per Household³					
Cooled Square Footage per Household⁴					
Electric Air-Conditioning	1,464	1,701	1,671	1,758	3.2
Central Air-Conditioning	1,823	2,137	2,132	2,145	3.0
Room/Wall Air-Conditioning	786	843	813	909	5.5

See footnotes at end of table.

Table CE3-10e. Electric Air-Conditioning Energy Expenditures in U.S. Households by Midwest Census Region, 1997 (Continued)

	Total U.S.	Midwest Census Region			RSE Row Factors
		Total	Census Division		
			East North Central	West North Central	
RSE Column Factor:	0.6	1.0	1.1	1.5	

Air-Conditioning Intensity [Cents÷(CDD×(CSF÷1000))]³

Air-Conditioning Intensity	Total U.S.	Total	East North Central	West North Central	RSE Row Factors
Electric Air-Conditioning	6.69	6.50	6.93	5.83	2.0
Central Air-Conditioning	6.08	6.26	6.67	5.70	1.9
Room/Wall Air-Conditioning	8.25	7.27	8.03	5.97	6.1

¹ The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

² Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These room/wall air-conditioners are not included in the count of 25.2 million households using room/wall air-conditioners. Note: This applies to all occurrences of central air-conditioning.

³ Averages are for those households using any electric air-conditioning, central air-conditioning, or room/wall air-conditioning, as applicable.

⁴ In previous RECS, square footage measurements were obtained during the personal interview. In the 1997 RECS, square footage was estimated using a regression equation developed with the 1993 RECS data. The 1997 RECS estimated square footage tends to be larger than the 1993 measured square footage.

NF = No applicable RSE row factor.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE3-11e. Electric Air-Conditioning Energy Expenditures in U.S. Households by South Census Region, 1997

	South Census Region					RSE Row Factors
	Total U.S.	Census Division			West South Central	
		Total	South Atlantic	East South Central		
RSE Column Factor:	0.6	0.8	1.1	1.3	1.4	
Million Households						
Total U.S. Households	101.5	35.9	18.7	6.3	10.8	NF
No/Don't Use Air-Conditioning	28.8	2.7	1.5	0.4	0.8	11.5
Electric Air-Conditioning ¹	72.6	33.2	17.2	6.0	10.0	1.5
Central Air-Conditioning ²	47.5	24.9	13.3	4.2	7.4	3.2
Room/Wall Air-Conditioning	25.2	8.3	3.9	1.8	2.6	6.7
Billion Dollars						
Electric Air-Conditioning Expenditures						
Total	10.20	6.67	3.36	0.80	2.51	5.1
Central Air-Conditioning	8.29	5.63	2.93	0.65	2.05	5.6
Room/Wall Air-Conditioning	1.91	1.04	0.43	0.15	0.47	9.7
Dollars per Household³						
Electric Air-Conditioning Expenditures per Household						
Electric Air-Conditioning	140	201	195	133	251	4.7
Central Air-Conditioning	175	226	220	155	278	4.4
Room/Wall Air-Conditioning	76	125	111	82	175	7.0
1997 Cooling Degree-Days (CDD) per Household³						
1997 Cooling Degree-Days per Household						
Total U.S. Households	1,274	2,044	2,023	1,518	2,387	4.3
No/Don't Use Air-Conditioning	868	1,840	1,758	1,481	2,149	7.6
Electric Air-Conditioning	1,435	2,060	2,046	1,520	2,406	4.2
Central Air-Conditioning	1,576	2,112	2,137	1,529	2,399	4.5
Room/Wall Air-Conditioning	1,169	1,905	1,737	1,500	2,425	4.7
Cooled Square Footage (CSF) per Household³						
Cooled Square Footage per Household⁴						
Electric Air-Conditioning	1,464	1,443	1,496	1,407	1,375	2.6
Central Air-Conditioning	1,823	1,659	1,695	1,679	1,584	2.8
Room/Wall Air-Conditioning	786	796	813	765	791	4.3

See footnotes at end of table.

Table CE3-11e. Electric Air-Conditioning Energy Expenditures in U.S. Households by South Census Region, 1997 (Continued)

	Total U.S.	South Census Region				RSE Row Factors
		Total	Census Division			
			South Atlantic	East South Central	West South Central	
RSE Column Factor:	0.6	0.8	1.1	1.3	1.4	

Air-Conditioning Intensity [Cents÷(CDD×(CSF÷1000))]³

Air-Conditioning Intensity	Total U.S.	Total	South Atlantic	East South Central	West South Central	RSE Row Factors
Electric Air-Conditioning	6.69	6.76	6.39	6.24	7.58	2.0
Central Air-Conditioning	6.08	6.46	6.08	6.05	7.31	2.2
Room/Wall Air-Conditioning	8.25	8.26	7.85	7.14	9.15	4.2

¹ The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

² Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These room/wall air-conditioners are not included in the count of 25.2 million households using room/wall air-conditioners. Note: This applies to all occurrences of central air-conditioning.

³ Averages are for those households using any electric air-conditioning, central air-conditioning, or room/wall air-conditioning, as applicable.

⁴ In previous RECS, square footage measurements were obtained during the personal interview. In the 1997 RECS, square footage was estimated using a regression equation developed with the 1993 RECS data. The 1997 RECS estimated square footage tends to be larger than the 1993 measured square footage. NF = No applicable RSE row factor.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE3-12e. Electric Air-Conditioning Energy Expenditures in U.S. Households by West Census Region, 1997

	West Census Region				RSE Row Factors
	Total U.S.	Census Division			
		Total	Mountain	Pacific	
RSE Column Factor:	0.4	1.1	1.8	1.4	
Million Households					
Total U.S. Households	101.5	21.8	6.2	15.6	NF
No/Don't Use Air-Conditioning	28.8	13.2	3.2	9.9	6.7
Electric Air-Conditioning ¹	72.6	8.7	2.9	5.7	6.9
Central Air-Conditioning ²	47.5	5.9	2.1	3.8	7.9
Room/Wall Air-Conditioning	25.2	2.8	0.8	1.9	11.3
Billion Dollars					
Electric Air-Conditioning Expenditures					
Total	10.20	1.11	0.48	0.63	10.0
Central Air-Conditioning	8.29	0.94	0.42	0.52	10.6
Room/Wall Air-Conditioning	1.91	0.17	0.06	0.11	15.7
Dollars per Household³					
Electric Air-Conditioning Expenditures per Household					
Electric Air-Conditioning	140	128	161	111	9.1
Central Air-Conditioning	175	160	199	138	8.4
Room/Wall Air-Conditioning	76	61	68	58	13.8
1997 Cooling Degree-Days (CDD) per Household³					
1997 Cooling Degree-Days per Household					
Total U.S. Households	1,274	1,166	1,562	1,010	6.6
No/Don't Use Air-Conditioning	868	923	1,053	880	9.3
Electric Air-Conditioning	1,435	1,536	2,122	1,235	7.2
Central Air-Conditioning	1,576	1,705	2,482	1,272	7.5
Room/Wall Air-Conditioning	1,169	1,181	1,225	1,162	9.4
Cooled Square Footage (CSF) per Household³					
Cooled Square Footage per Household⁴					
Electric Air-Conditioning	1,464	1,303	1,294	1,308	4.6
Central Air-Conditioning	1,823	1,609	1,540	1,647	4.3
Room/Wall Air-Conditioning	786	659	679	650	6.3

See footnotes at end of table.

Table CE3-12e. Electric Air-Conditioning Energy Expenditures in U.S. Households by West Census Region, 1997 (Continued)

	Total U.S.	West Census Region			RSE Row Factors
		Total	Census Division		
			Mountain	Pacific	
RSE Column Factor:	0.4	1.1	1.8	1.4	

Air-Conditioning Intensity [Cents÷(CDD×(CSF÷1000))]³

Air-Conditioning Intensity	Total U.S.	West Census Region Total	Mountain	Pacific	RSE Row Factors
Electric Air-Conditioning	6.69	6.39	5.88	6.86	4.1
Central Air-Conditioning	6.08	5.82	5.20	6.58	4.2
Room/Wall Air-Conditioning	8.25	7.89	8.22	7.73	7.4

¹ The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

² Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These room/wall air-conditioners are not included in the count of 25.2 million households using room/wall air-conditioners. Note: This applies to all occurrences of central air-conditioning.

³ Averages are for those households using any electric air-conditioning, central air-conditioning, or room/wall air-conditioning, as applicable.

⁴ In previous RECS, square footage measurements were obtained during the personal interview. In the 1997 RECS, square footage was estimated using a regression equation developed with the 1993 RECS data. The 1997 RECS estimated square footage tends to be larger than the 1993 measured square footage. NF = No applicable RSE row factor.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.